

LS ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:55599 CAPLUS Full-text

DN 112:55599

TI Preparation and hydrolysis of 3-(4-amino-2-hydroxyphenyl)-1-oxo-isoindolenines

IN Kranz, Joachim; Landmann, Bernd; Mayer, Udo

PA BASF A.-G., Fed. Rep. Ger.

SO Ger. Offen., 7 pp.

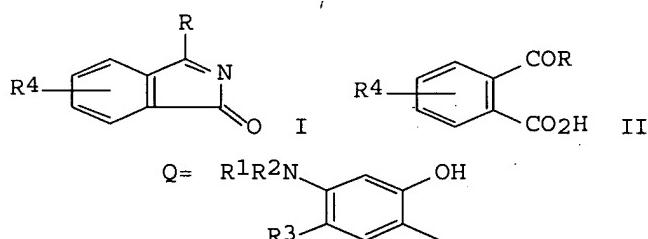
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--------------------------------------|------|----------|-----------------|----------|
| PI | DE 3800577 | A1 | 19890720 | DE 1988-3800577 | 19880112 |
| | EP 327792 | A2 | 19890816 | EP 1989-100028 | 19890103 |
| | EP 327792 | A3 | 19891004 | | |
| | EP 327792 | B1 | 19931222 | | |
| | R: CH, DE, FR, GB, IT, LI | | | | |
| | US 4904798 | A | 19900227 | US 1989-295462 | 19890110 |
| | JP 01213261 | A2 | 19890828 | JP 1989-2964 | 19890111 |
| PRAI | DE 1988-3800577 | A | 19880112 | | |
| OS | CASREACT 112:55599; MARPAT 112:55599 | | | | |
| GI | | | | | |



AB The title compds. [I; R = Q; R1 = H, (un)substituted C1-12 alkyl, C5-8 cycloalkyl, Ph; R2 = H, (un)substituted C1-6 alkyl; NR1R2 = morpholino, pyrrolidino, piperdino; R3 = H, Me; R4 = H, Cl, C1-4 alkyl, NO2] were prepared by condensation of 3-aminophenols QH with 3-amino-1-oxo- isoindolenines I (R = NH2, R4 as above) in the presence of acids, and hydrolyzed to II (R and R4 as defined). Thus, 4,3-Me(EtNH)C6H3OH was heated 1 h at 120° with I.HCl (R = NH2, R4 = H) in DMF to give I (R = Q, R1 = Et, R2 = R4 = H, R3 = Me) which was refluxed 5 h in 20% aqueous KOH to give II (R, R1, R2, R3, R4 unchanged).

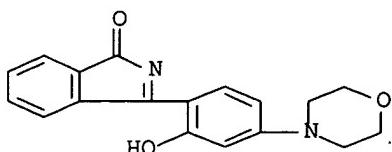
IT 124810-41-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrolysis of)

RN 124810-41-9 CAPLUS

CN 1H-Isoindol-1-one, 3-[2-hydroxy-4-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1981:123114 CAPLUS Full-text

DN 94:123114

TI Disperse dyes and their use

IN Neumann, Peter; Elser, Wolfgang; Bock, Gustav; Kermmer, Wolf Dieter

PA BASF A.-G., Fed. Rep. Ger.

SO Ger. Offen., 47 pp.

CODEN: GWXXBX

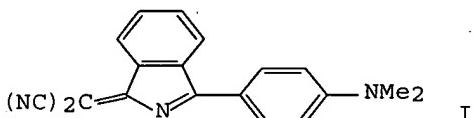
DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | DE 2912428 | A1 | 19801009 | DE 1979-2912428 | 19790329 |
| | US 4373102 | A | 19830208 | US 1980-128156 | 19800307 |
| | EP 17132 | A1 | 19801015 | EP 1980-101558 | 19800325 |
| | EP 17132 | B1 | 19811014 | | |
| | R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| | JP 55131064 | A2 | 19801011 | JP 1980-39143 | 19800328 |
| | JP 63060072 | B4 | 19881122 | | |
| PRAI | DE 1979-2912428 | A | 19790329 | | |

GI



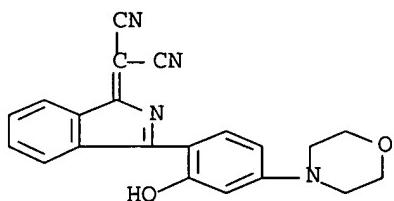
AB Substituted 1-(cyanomethylene)-3-(4-aminophenyl)-1H-isoindole derivs. are prepared and used to dye polyester fibers and polystyrene [9003-53-6] fast blue to violet shades. Thus, 3-(dicyanomethylene)-1-iminoisoindoline [43002-19-3] was heated with N,N-dimethylaniline [121-69-7] in Ac2O containing H2SO4 to give I [76751-73-0], reddish blue on polyester fibers.

IT 76751-49-0

RL: TEM (Technical or engineered material use); USES (Uses)
(dye, for polyester fibers, preparation of)

RN 76751-49-0 CAPLUS

CN Propanedinitrile, [3-[2-hydroxy-4-(4-morpholinyl)phenyl]-1H-isoindol-1-ylidene]- (9CI) (CA INDEX NAME)



LS ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:620332 CAPLUS Full-text

DN 91:220332

TI Electrorecording paper

IN Iwata, Susumu

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

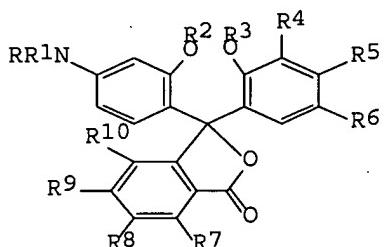
DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--------------|------|----------|-----------------|----------|
| PI | JP 54104352 | A2 | 19790816 | JP 1978-9914 | 19780202 |
| PRAI | JP 1978-9914 | A | 19780202 | | |

GI



I

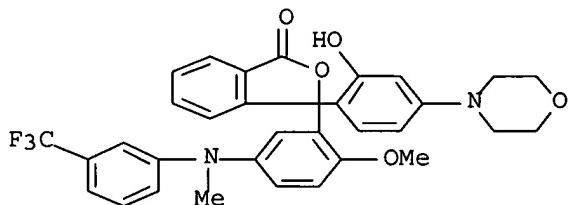
AB Lactones of the general formula I [R,R1 = H, lower alkyl, aralkyl, Ph, -CH₂CH₂CN, -CH₂CH₂OH, -CH₂CH₂X (X = halogen); RR1 in combination may form (CH₂)₄, (CH₂)₅, (CH₂)₂O(CH₂)₂; R₂,R₃ = H, lower alkyl, aralkyl, acyl, Ph; R₄,R₅,R₆ = H, lower alkyl, lower alkoxy, halo, halomethyl, NO₂, amino; R₇,R₈,R₉,R₁₀ = H, lower alkyl, lower alkoxy, halo; R₈R₉ in combination may complete a naphthalene ring] are used as the color formers for electrorecording materials which are based on the color formation by joule heat. The color formers give images having excellent light fastness. Thus, an Al-laminated paper support was coated with a composition consisting of 3-(4-diethylamino-2-hydroxyphenyl)-3-(5-anilino-4-methyl-2-methoxyphenyl)phthalide 3, ZnO 30, Bisphenol A 6, a 10% poly(vinyl alc.) solution 50, a styrene-acrylic acid copolymer emulsion (20% solids) 5, and H₂O 6 g to give an electrorecording paper. The recording was carried out at 120 v, 180 rpm-210 mm, 4 lines/mm, and 10 g/cm² to form images with optical d. of 0.9. The images showed good light fastness.

IT 68882-50-8

RL: USES (Uses) (electrorecording sheet containing)

RN 68882-50-8 CAPLUS

CN 1(3H)-Isobenzofuranone, 3-[2-hydroxy-4-(4-morpholinyl)phenyl]-3-[2-methoxy-5-[methyl[3-(trifluoromethyl)phenyl]amino]phenyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:160127 CAPLUS Full-text

DN 90:160127

TI Thermal recording materials

IN Iwata, Susumu; Kubo, Keiji; Miyajima, Shigeru; Tamura, Hiroshi

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

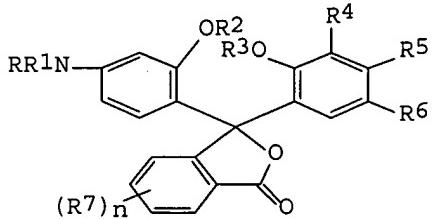
DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | JP 53100838 | A2 | 19780902 | JP 1977-14963 | 19770216 |
| | JP 57052918 | B4 | 19821110 | | |
| PRAI | JP 1977-14963 | A | 19770216 | | |

GI



I

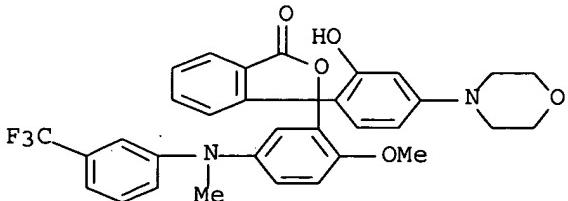
AB Heat-sensitive recording materials contain (1) a lactone of the general formula I [R, R1 = H, lower alkyl, aralkyl, Ph, substituted Ph, cyanoethyl, HOCH2CH2, β-haloethyl; RR1 in combination may form (CH2)4, (CH2)5, (CH2)2O(CH2)2; R2, R3 = H, lower alkyl, aralkyl, amyl, Ph; ≥2 of R2 and R3 is H; R4, R5, R6 = H, lower alkyl, lower alkoxy, halogen, halogenated Me, NO2, NH2, substituted amino; R7 = lower alkyl, lower alkoxy, halogen; n = 0-4], an acidic substance, a waxy substance, and an alkaline substance. The thermal recording materials exhibit good resistance toward pressure-induced blemishes, good shelf life, and give high d. clear images. Thus, 3-(4-diethylamino-2-hydroxyphenyl)-3-(5-anilino-4-methyl-2-methoxyphenyl)phthalide 3 g, a 20% poly(vinyl alc.) solution 20 mL, stearamide 6, NaO2CCCl3 2 g, and H2O 30 mL were mixed well, and the resultant dispersion was mixed with another dispersion consisting of Bisphenol A 12 g, a 10% poly(vinyl alc.) solution 10, and H2O 40 mL to give a heat-sensitive coating composition. The coating composition was coated on a paper support and used in a thermal printer to give a copy with good image optical d. and good storage stability.

IT 68882-50-8

RL: USES (Uses) (coating compns. containing, for thermal recording paper)

RN 68882-50-8 CAPLUS

CN 1(3H)-Isobenzofuranone, 3-[2-hydroxy-4-(4-morpholinyl)phenyl]-3-[2-methoxy-5-[methyl[3-(trifluoromethyl)phenyl]amino]phenyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:95425 CAPLUS Full-text

DN 90:95425

TI Thermal recording materials

IN Iwata, Susumu; Kubo, Keiji; Miyajima, Shigeru; Tamura, Hiroshi

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

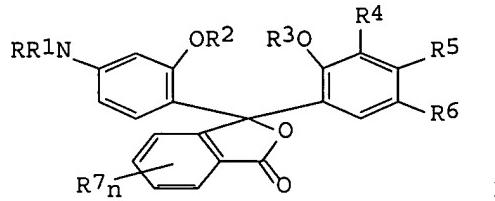
DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| PI | JP 53099951 | A2 | 19780831 | JP 1977-14140 | 19770214 |
| | JP 57052917 | B4 | 19821110 | | |
| PRAI | JP 1977-14140 | A | 19770214 | | |

GI



I

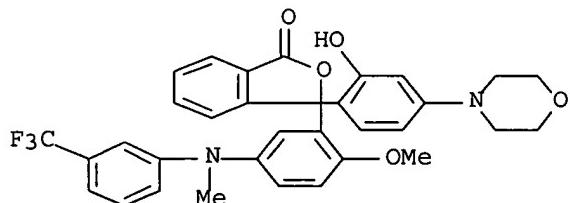
AB Thermal recording materials contain an acidic substance, an alkali metal salt, and a lactone of the general formula I (R, R1 = H, lower alkyl, aralkyl, Ph, substituted aralkyl, substituted Ph, CH2CH2CN, CH2CH2OH, 2-haloethyl, or RR1 in combination may complete a pyrrolidino, piperidino, or morpholino group; R2, R3 = H, lower alkyl, aralkyl, acyl, Ph, and ≥1 of R2 and R3 is H; R4, R5, R6 = H, lower alkyl, lower alkoxy, halogen, halomethyl, NO2, NH2, substituted amino; R7 = H, lower alkyl, lower alkoxy, halogen; n = 0-4). The thermal recording materials yield clear images without blemishes. Thus, a dispersion consisting of 3-(4'-diethylamino-2'-hydroxyphenyl)-3-(5'-anilino-4'-methyl-2'-methoxyphenyl)phthalide 3, Na2CO3 2 g, a 10% poly(vinyl alc.) solution 20 and H2O 30 mL was mixed with another dispersion consisting of Bisphenol A 12 g, a 10% poly(vinyl alc.) solution 10, and H2O 40 mL, and the mixture was coated on a paper support to give a thermal recording paper. The paper yielded clear black images when printed with a thermal printer.

IT 68882-50-8

RL: USES (Uses) (heat-sensitive color-forming compns. containing organic acid, alkali metal salt and, for thermal recording papers)

RN 68882-50-8 CAPLUS

CN 1(3H)-Isobenzofuranone, 3-[2-hydroxy-4-(4-morpholinyl)phenyl]-3-[2-methoxy-5-[methyl[3-(trifluoromethyl)phenyl]amino]phenyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:64427 CAPLUS Full-text

DN 90:64427

TI Heat-sensitive imaging materials

IN Iwata, Susumu; Kubo, Keiji; Tamura, Hiroshi; Miyajima, Shigeru

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

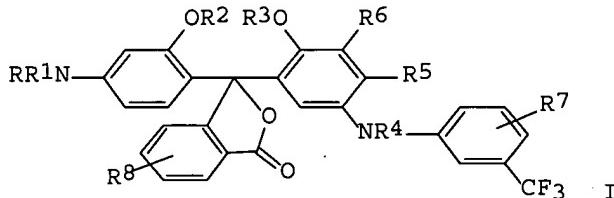
DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 53065739 | A2 | 19780612 | JP 1976-140174 | 19761124 |
| PRAI | JP 1976-140174 | A | 19761124 | | |

GI



AB Heat-sensitive imaging materials are described that contain a lactone of the general formula I [R, R1 = H, lower alkyl, aralkyl, Ph, CH2CH2CN, CH2CH2OH, β -haloethyl, or R, R1 in combination may form (CH2)4, (CH2)5, (CH2)2O(CH2)2; R2, R3 = H, lower alkyl, amyl, Ph, and ≥ 1 of R2, R3 is H; R4 = H, aralkyl, lower alkyl; R5, R6 = H, lower alkyl, lower alkoxy, halogen, NO2, NH2; R7, R8 = H, lower alkyl, lower alkoxy, halogen; and n, m ≤ 4] as the color former. Thus, 3-(4'-diethylamino-2'-hydroxyphenyl)-3-(5'-N-methyl-m-trifluoromethylanilino-2'-ethoxyphenyl)phthalide was dispersed in an aqueous poly(vinyl alc.) solution, and Bisphenol A was then dispersed in another poly(vinyl alc.) solution, the 2 dispersions were mixed, and the mixture was coated on a paper support to give a heat-sensitive imaging paper which formed black images with high optical d. and good lightfastness, when used in a thermal printer.

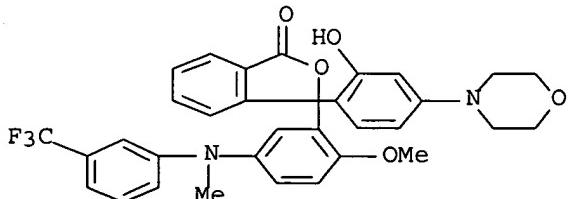
IT 68882-50-8

RL: USES (Uses)

(color-former compns. containing Bisphenol A and, for heat-sensitive copying papers)

RN 68882-50-8 CAPLUS

CN 1(3H)-Isobenzofuranone, 3-[2-hydroxy-4-(4-morpholinyl)phenyl]-3-[2-methoxy-5-[methyl[3-(trifluoromethyl)phenyl]amino]phenyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:46582 CAPLUS Full-text

DN 90:46582

TI Thermal recording materials

IN Iwata, Susumu; Kubo, Keiji; Tamura, Hiroshi; Miyajima, Shigeru

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

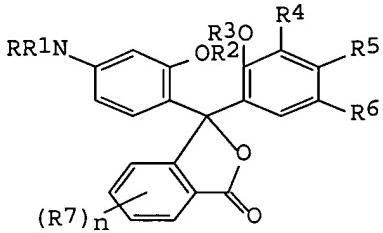
DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 53082421 | A2 | 19780720 | JP 1976-159144 | 19761228 |
| | JP 57052916 | B4 | 19821110 | | |
| PRAI | JP 1976-159144 | A | 19761228 | | |

GI



I

AB Thermal recording materials are described which contain a lactone compound I (R, R1 = H, lower alkyl, aralkyl, Ph, cyanoethyl, β -hydroxyethyl, β -haloethyl, or RR1 together form $-(CH_2)_4-$, $-(CH_2)_5-$, $-CH_2CH_2OCH_2CH_2-$; R2, R3 = H, lower alkyl, aralkyl, amyl, H where ≥ 1 of R2 and R3 is H; R4, R5, R6 = H, lower alkyl, lower alkoxy, halogen, halomethyl, NO₂, amino; R7 = H, lower alkyl, lower alkoxy, halogen; n = 0-4), an acidic substance, and a substance which forms an alkaline substance upon heating. Thus, 3-(4'-diethylamino-2'-hydroxyphenyl)-3-[5'-methyl(3''-trifluoromethylphenyl)amino-2'-ethoxyphenyl]phthalide 1, NaO₂CCCl₃ 1, a 10% poly(vinyl alc.) solution 15, and H₂O 35 g were mixed well, and the resultant dispersion was mixed with another dispersion composed of 4,4'-isopropylidenediphenol 4, 10% poly(vinyl alc.) solution 15, and H₂O 35 g, and the mixture was coated on a paper support to give thermog. recording paper, which yielded a high quality copy when used in a thermal printer.

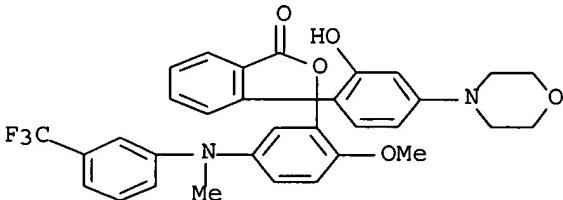
IT 68882-50-8

RL: USES (Uses)

(thermog. recording heat-sensitive composition containing)

RN 68882-50-8 CAPLUS

CN 1 (3H)-Isobenzofuranone, 3-[2-hydroxy-4-(4-morpholinyl)phenyl]-3-[2-methoxy-5-[methyl[3-(trifluoromethyl)phenyl]amino]phenyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:6114 CAPLUS Full-text

DN 90:6114

TI Phthalide derivatives

IN Kawai, Hajime; Tsunemitsu, Katsuhiko

PA Yamada Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

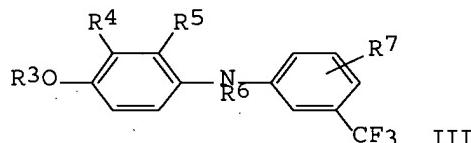
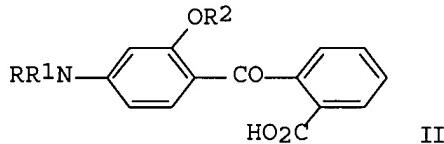
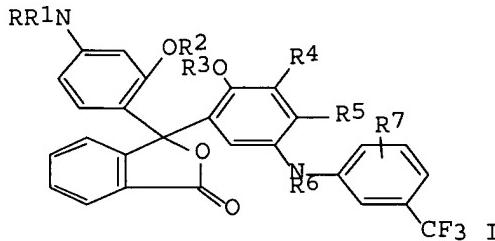
DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | JP 53063436 | A2 | 19780606 | JP 1976-138099 | 19761116 |
| | JP 59052672 | B4 | 19841220 | | |
| PRAI | JP 1976-138099 | A | 19761116 | | |

GI



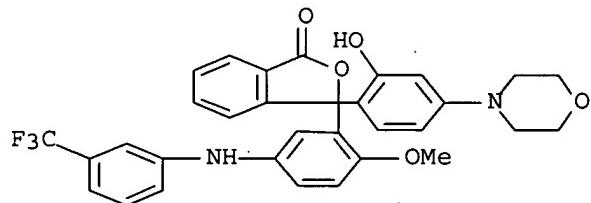
AB Phthalides (I; R, R1 = H, alkyl, aryl, NRR1 = heterocycle; R2 = H, alkyl, R3 = H, alkyl, PhCH2; R4, R5 = H, Me, Cl; R6 = H, Me; R7 = H, Cl) were prepared by condensation of m-HOC6H4NRR1 with phthalic anhydride to give benzopyrones (II) followed by condensation of II with diarylamines (III). I were chromophores. Thus, 31.3 g II (R = R1 = Et, R2 = H) and 26.7 g III (R3 = Me, R4-7 = H) in concentrated H2SO4 was stirred 48 h at 10° to give 50% I (R = R1 = Et, R2 = R4-7 = H, R3 = Me). Similarly prepared were 31 addnl. I.

IT 68535-00-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 68535-00-2 CAPLUS

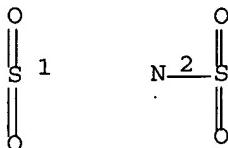
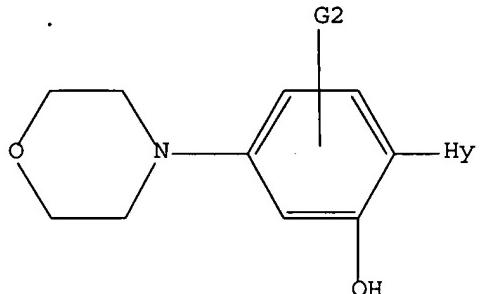
CN 1(3H)-Isobenzofuranone, 3-[2-hydroxy-4-(4-morpholinyl)phenyl]-3-[2-methoxy-5-[(3-(trifluoromethyl)phenyl)amino]phenyl]- (9CI) (CA INDEX NAME)



=> d 12; d his; log y

L2 HAS NO ANSWERS

L1 STR



G1 C,O,S,N,P
G2 H,[@1],[@2]

Structure attributes must be viewed using STN Express query preparation.

L2 QUE ABB=ON PLU=ON L1

(FILE 'HOME' ENTERED AT 15:21:09 ON 30 NOV 2005)

FILE 'REGISTRY' ENTERED AT 15:25:32 ON 30 NOV 2005

L1 STRUCTURE UPLOADED
L2 QUE L1
L3 0 S L2
L4 4 S L2 FUL

FILE 'CAPLUS' ENTERED AT 15:26:01 ON 30 NOV 2005

L5 8 S L4

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY

SESSION

39.97

202.77

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

CA SUBSCRIBER PRICE

ENTRY

SESSION

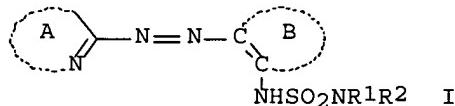
-5.84

-5.84

STN INTERNATIONAL LOGOFF AT 15:26:27 ON 30 NOV 2005

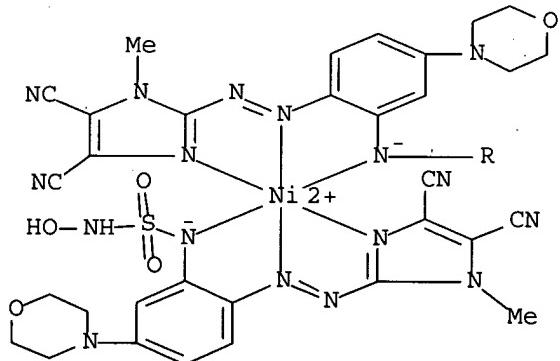
L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2005:1020790 CAPLUS Full-text
 DN 143:327747
 TI Azo metal chelate compounds and their use in short wavelength laser-readable and recordable optical recording media
 IN Nakagawa, Shinichi; Nishimoto, Taizo; Saito, Yasunori; Murakami, Masakazu; Sugimoto, Kenichi; Misawa, Tsutayoshi; Kinoshita, Tomoyuki; Kosaka, Akihiro; Kato, Kenichi; Masaoka, Toshihiro; Terao, Hiroshi; Kumagaya, Yojiro
 PA Mitsui Chemicals Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 35 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------|------|----------|-----------------|----------|
| PI JP 2005255729 | A2 | 20050922 | JP 2004-66047 | 20040309 |
| PRAI JP 2004-66047 | | 20040309 | | |
| GI | | | | |

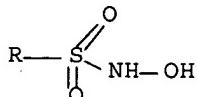


AB The title dye compds. are formed from ≥ 2 azo compds. and salts of polyvalent metals and can have a structure of I (ring A = optionally substituted heterocyclic rings; ring B = optionally substituted aromatic hydrocarbyl rings).
 IT 865095-20-1 865095-22-3 865095-28-9
 RL: TEM (Technical or engineered material use); USES (Uses)
 (photo dye; azo metal chelate compds. and their use in optical recording media)
 RN 865095-20-1 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

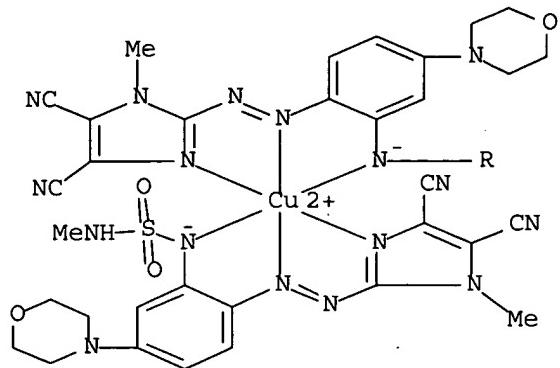


PAGE 2-A

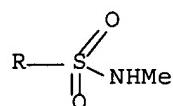


RN 865095-22-3 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

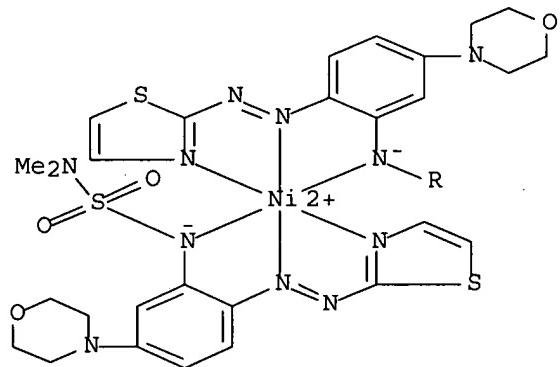


PAGE 2-A

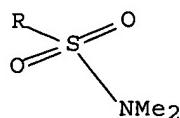


RN 865095-28-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



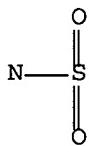
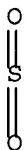
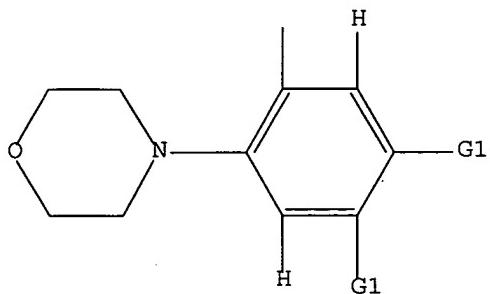
PAGE 2-A



=> d 12; d his; log y

L2 HAS NO ANSWERS

L1 STR



G1 C,O,S,N,P

G2 H

Structure attributes must be viewed using STN Express query preparation.

L2 QUE ABB=ON PLU=ON L1

(FILE 'REGISTRY' ENTERED AT 15:04:17 ON 30 NOV 2005)

DEL HIS Y

L1 STRUCTURE UPLOADED

L2 QUE L1

L3 0 S L2

L4 3 S L2 FUL

FILE 'CAPLUS' ENTERED AT 15:05:49 ON 30 NOV 2005

L5 1 S L4

COST IN U.S. DOLLARS

| SINCE FILE ENTRY | TOTAL SESSION |
|---------------------|------------------|
|---------------------|------------------|

FULL ESTIMATED COST

5.39 330.89

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE ENTRY | TOTAL SESSION |
|---------------------|------------------|
|---------------------|------------------|

CA SUBSCRIBER PRICE

-0.73 -0.73

STN INTERNATIONAL LOGOFF AT 15:06:21 ON 30 NOV 2005